UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,924	03/17/2000	Nozomi Miura	32429	3861

116 7590 11/21/2003

PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER	
VUONG, QUOCHIEN B	
ART UNIT	**PAPER NUMBER**
2685	

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/527,924	MIURA, NOZOMI	
	Examiner	Art Unit	
	Quochien B Vuong	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *2,4-7 and 11-14* is/are withdrawn from consideration.

5)☒ Claim(s) *16 and 17* is/are allowed.

6)☒ Claim(s) *1,8,9 and 15* is/are rejected.

7)☒ Claim(s) *3 and 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This action in response to Applicant's response filed on 08/25/03. Claims 1, 3, 8, 9, 10, and 15-17 are now pending in the present application. **This action is made final.**

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 8, 9,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gottfried et al. (US 5,613,230) in view of De Loe, Jr. (US 5,603,113).

Regarding claim 1, Gottfried et al. (figure 1) disclose an automatic gain control circuit comprising: a gain variable amplifier (item 14) which controls an amplitude of a receiving signal based on a control signal (column 3, lines 11-14); control signal generating means (items 40 and 22) for level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier (column 3, line 55- column 4, line 5); and controlling means for deciding at least one of a generation timing of the control signal and a generation period of the control signal in response to a predetermined physical quantity, and controlling the control signal

generating means (column 5, lines 23-31). Gottfried et al. fail to disclose averaging the detected receiving signal level for a predetermined time. However, De Loe, Jr. disclose the receiving signal level is averaged for a predetermined time (column 1, line 65 – column 2, line 17). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of De Loe, Jr. to Gottfried et al. to properly control the gain of the variable amplifier based on the average of the detected receiving signal level.

Regarding claim 8, Gottfried et al. (figure 1) disclose a receiver device comprising: an automatic gain control circuit including: a gain variable amplifier (item 14) which controls an amplitude of a receiving signal based on a control signal; control signal generating means (items 40 and 22) for level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier (column 3, line 55- column 4, line 5); and controlling means for deciding at least one of a generation timing of the control signal and a generation period of the control signal in response to a predetermined physical quantity, and controlling the control signal generating means (column 5, lines 23-31). Gottfried et al. fail to disclose averaging the detected receiving signal level for a predetermined time. However, De Loe, Jr. disclose the receiving signal level is averaged for a predetermined time (column 1, line 65 – column 2, line 17). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of De Loe, Jr. to Gottfried et al. to properly control the gain of the variable amplifier based on the average of the detected receiving signal level.

Regarding claim 9, Gottfried et al. (figure 1) disclose an automatic gain control method in a receiver device including a gain variable amplifier (item 14) which controls an amplitude of a receiving signal based on a control signal, the method comprising: a control signal generating step of level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier (column 3, line 55- column 4, line 5); and a controlling step of deciding a generation timing of the control signal or a generation period of the control signal in response to a predetermined physical quantity (column 5, lines 23-31). Gottfried et al. fail to disclose averaging the detected receiving signal level for a predetermined time. However, De Loe, Jr. disclose the receiving signal level is averaged for a predetermined time (column 1, line 65 – column 2, line 17). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of De Loe, Jr. to Gottfried et al. to properly control the gain of the variable amplifier based on the average of the detected receiving signal level.

Regarding claim 15, Gottfried et al. (figure 1) disclose a computer-readable recording medium for recording the automatic gain control method for the receiver device as a program to be executed by a computer, said method comprising: a control signal generating step of level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier (items 14, 40, and 22) (column 3, line 55- column 4, line 5); and a controlling step of deciding a generation timing of the control signal or a generation period of the control signal in response to a predetermined physical quantity (column 5, lines 23-31). Gottfried et al. fail to disclose

averaging the detected receiving signal level for a predetermined time. However, De Loe, Jr. disclose the receiving signal level is averaged for a predetermined time (column 1, line 65 – column 2, line 17). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of De Loe, Jr. to Gottfried et al. to properly control the gain of the variable amplifier based on the average of the detected receiving signal level.

Allowable Subject Matter

3. Claims 16 and 17 are allowed over the cited prior art.

Regarding the independent claims 16 and 17, the claims include all of the limitations of the base claim and the objected original claims 3 and 10, respectively, therefore, claims 16 and 17 are allowable with the same reasons set forth in the previous Office action (paper #7).

4. Claims 3 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 3 and 10, Gottfried et al. and De Loe, Jr. disclose the automatic gain control circuit and method as in claims 1 and 9 above, respectively. However, Gottfried et al. and De Loe, Jr. fail to teach or suggest the automatic gain control circuit and method wherein the controlling means decides the generation timing of the control signal or the generation period of the control signal using a lapsed time in operation of the automatic gain control circuit as the predetermined physical quantity.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 8, 9, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA 22202, Sixth Floor (Receptionist).

Any inquiry concerning this communication from the examiner should be directed to Quochien B. Vuong whose telephone number is (703) 306-4530. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m. EST.

If attemps to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (703) 306-0377.

QUOCHIEN B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong
Nov. 12, 2003.